5

10

ABSTRACT

A method of classifying samples to one of a number of predetermined classes involves using a number of class models or classifiers to form order statistic for each classifier. A linear combination of the order statistic (L-statistic) is calculated to determine the confidence of that particular classifier, both in general and for that particular sample. Relative weights are then derived from these confidences, and used to calculate a weighted summation across all classifiers for each class of the likelihoods that a sample belongs to that class. The sample is classified in the class which has the associated weighted summation which is greatest in value.